

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): An apparatus for outputting an image by generating at least one of a print, a print proof, a printing plate, and a platemaking film directly from image data including at least one color element, comprising:

preparing means for preparing a plurality of gradation conversion curves whose gradation characteristics are different stepwise from each other;

selecting means for selecting one of said gradation conversion curves with respect to at least one color element; and

gradation converting means for being supplied with image data, converting gradations of the supplied image data according to the selected gradation conversion curve, and outputting image data represented by the image data with the corrected gradations.

2. (original): An apparatus according to claim 1, wherein said preparing means comprises storing means for storing the gradation conversion curves whose gradation characteristics are different stepwise from each other.

3. (original): An apparatus according to claim 1, wherein said preparing means comprises generating means for generating the gradation conversion curves whose gradation characteristics are different stepwise from each other.

4. (original): An apparatus according to claim 1, wherein each of said gradation conversion curves has gradation changes which correspond to exposure levels in a contact exposure process for producing printing plates.

5. (original): An apparatus according to claim 4, wherein each of said gradation conversion curves which has the gradation changes which correspond to said exposure levels is indicated by a title corresponding to one of the exposure levels.

6. (original): An apparatus according to claim 1, wherein said gradation conversion curves whose gradation characteristics are different stepwise from each other comprise a plurality of gradation conversion curves whose gradation characteristics are different stepwise from each other only in a highlight area, a middle-tone area, or a shadow area.

7. (original): An apparatus according to claim 2, further comprising:
gradation conversion curve generating/correcting means for newly generating or correcting said gradation conversion curves.

8. (original): An apparatus according to claim 1, further comprising:
display means for simultaneously displaying said gradation conversion curves.

9. (original): A method of outputting an image by generating at least one of a print, a print proof, a printing plate, and a platemaking film directly from image data including at least one color element, comprising the steps of:

preparing a plurality of gradation conversion curves whose gradation characteristics are different stepwise from each other;

selecting one of said gradation conversion curves with respect to at least one color element; and

converting gradations of supplied image data according to the selected gradation conversion curve, and outputting image data represented by the image data with the corrected gradations.

10. (original): A method according to claim 9, wherein said step of preparing comprises the step of:

storing the gradation conversion curves whose gradation characteristics are different stepwise from each other.

11. (original): A method according to claim 9, wherein said step of preparing comprises the step of:

generating the gradation conversion curves whose gradation characteristics are different stepwise from each other.

12. (original): A method according to claim 9, wherein each of said gradation conversion curves has gradation changes which correspond to exposure levels in a contact exposure process for producing printing plates.

13. (original): A method according to claim 12, wherein each of said gradation conversion curves which has the gradation changes which correspond to said exposure levels is indicated by a title corresponding to one of the exposure levels.

14. (original): A method according to claim 9, wherein said gradation conversion curves whose gradation characteristics are different stepwise from each other comprise a plurality of gradation conversion curves whose gradation characteristics are different stepwise from each other only in a highlight area, a middle-tone area, or a shadow area.

15. (new): An apparatus for outputting an image by generating at least one of a print, a print proof, a printing plate, and a platemaking film directly from image data including at least one color element, comprising:

a preparing unit preparing a plurality of gradation conversion curves whose gradation characteristics are different stepwise from each other;

a selecting unit selecting one of said gradation conversion curves with respect to at least one color element;

a gradation converting unit being supplied with image data, converting gradations of the supplied image data according to the selected gradation conversion curve; and

an output device outputting image data represented by the image data with the corrected gradations.

16. (new): The apparatus according to claim 15, wherein said preparing unit comprises a storing device for storing the gradation conversion curves.

17. (new): The apparatus according to claim 15, wherein said preparing unit comprises generating device for generating the gradation conversion curves.

18. (new): The apparatus according to claim 15, wherein each of said gradation conversion curves has gradation changes which correspond to exposure levels in a contact exposure process for producing printing plates.

19. (new): The apparatus according to claim 18, wherein each of said gradation conversion curves which has the gradation changes which correspond to said exposure levels is indicated by a title corresponding to one of the exposure levels.

20. (new): The apparatus according to claim 15, wherein said gradation conversion curves are different stepwise from each other only in a highlight area, a middle-tone area, or a shadow area.

21. (new): The apparatus according to claim 16, further comprising:
a gradation conversion curve generating/correcting device for newly generating or correcting said gradation conversion curves.

22. (new): The apparatus according to claim 15, further comprising:
a display device simultaneously displaying said gradation conversion curves.

23. (new): The apparatus of claim 1, wherein each of the gradation conversion curves is expressed by a fourth-order polynomial.

24. (new): The method of claim 9, wherein each of the gradation conversion curves is expressed by a fourth-order polynomial.

25. (new): The apparatus of claim 15, wherein each of the gradation conversion curves is expressed by a fourth-order polynomial.

26. (new): The apparatus of claim 23, wherein stepwise difference is the difference between two adjacent gradation conversion curves based a difference in a constant in the fourth-order polynomial.

27. (new): The method of claim 24, wherein stepwise difference is the difference between two adjacent gradation conversion curves based a difference in a constant in the fourth-order polynomial.

28. (new): The apparatus of claim 25, wherein stepwise difference is the difference between two adjacent gradation conversion curves based a difference in a constant in the fourth-order polynomial.